R. 89 W. R. 88 W. R. 87 W.

T. 23 N. T. 22 N. T. 21 N. T. 20 N. T. 19 N. T. 18 N. T. 17 N.

RAWLINS BELLE SPRING FAULT US 287 AND STATE 789 RAWLINS AIRPORT US 30 UNION PACIFIC Sugar Creek Hadsell Knobs HATFIELD OIL FIELD Little Sage Creek Pine Grove Creek Eagle Creek McKinney Creek Rosmussen Creek Muddy Creek CONTINENTAL DIVIDE MILLER HILL LAKE VALLEY ANTICLINE SAGE CREEK BASIN

EXPLANATION

Recent

Qal — Alluvium
Silt, sand, and gravel, stream-laid. Locally derived material. Yields little or no water to wells

Qg — Gravel
Gravel and sand composed of reworked Pliocene and Miocene deposits. Does not yield water to wells in the area

Qls — Landslide material
Sandstone and conglomerate derived from the Browns Park formation. Does not yield water to wells in the area. Small springs issue at the base of the material

Pleistocene

Qp — Pleistocene deposits, undifferentiated
Conglomerate, gray; contains pebbles, cobbles, and boulders derived from shale and sandstone of Mesozoic age. Does not yield water to wells in the area

Miocene and Pliocene

Tpm — Pliocene and Miocene rocks, undifferentiated
Sandstone, gray to brown, fine- to coarse-grained; contains beds of conglomerate; basal section composed of reworked Precambrian, Paleozoic, and Mesozoic rocks. Yields moderate supplies of water to wells

Miocene(?)

Tbu / Tbc — Browns Park formation
Upper part of Browns Park formation, (Tbu). Sandstone, gray, white, and brown, fine- to medium-grained; contains fragments of older deposits. Many springs issue at base of formation, would yield moderate supplies of water to wells. Basal conglomerate of Browns Park formation, (Tbc). Conglomerate and sandstone; composed of quartz, quartzite, and diabase pebbles in sandstone and volcanic-ash matrix. Yields moderate to large supplies of water to wells

Paleocene

Tfu — Fort Union formation
Shale and sandstone; zones of interbedded shale and sandstone alternating with zones of shale; contains carbonaceous material and coal beds. Small supplies of water could be obtained from the sandstone beds

Upper Cretaceous

Kln — Lance formation
Shale and sandstone in alternating beds; contains lignite and beds of highly fossiliferous shale. Small supplies of water could be obtained from sandstone beds

Knl — Lewis shale
Shale, dark-gray, fissile to sandy, buff; contains bentonite and sandstone lenses. Sandstone lenses will yield very small quantities of water to wells

Kmv — Mesaverde formation
Sandstone, fine- to medium-grained, gray to brown, and sandy, dark-gray to gray shale. Not known to yield water to wells, but small supplies probably could be obtained from the sandstone beds

Ks — Steele shale
Kn — Niobrara formation
Ksn — Steele shale and Niobrara formation, undifferentiated
Shale and clay, blue-gray, gray, and yellow, calcareous; chalky in places; contains some sandstone beds. Small supplies of water could be obtained from the sandstone beds

Kf — Frontier formation
Shale, dark-gray, sandy; with beds of sandstone. Yields moderate supplies of water to wells

Lower Cretaceous

Kmr — Mowry shale
Shale, gray to dark-gray, dense, siliceous; contains fish scales. Yields little or no water to wells

Kt — Thermopolis shale
Shale, gray to dark-gray; contains thin lenses of sandstone. Yields little or no water to wells

Kcv — Cloverly formation
Sandstone with beds and lenses of shale separating the upper sandstone from a basal conglomerate. Yields moderate to large quantities of water, usually under artesian head

Upper Jurassic

Jm — Morrison formation
Shale, variegated, and sandstone with thin lenses of limestone. Yields little or no water to wells

Jsd — Sundance formation
Limestone and shale in upper part. Sandstone with lenses of shale and limestone in lower part. Moderate to small supplies of water probably could be obtained from sandstone beds

Lower Jurassic

Nugget sandstone
Sandstone, fine- to coarse-grained, buff to white; in part crossbedded. Will yield very small quantities of water to wells

Triassic

Chugwater formation
Shale and sandstone and one thin bed of limestone; very highly colored. Small supplies of water could be obtained from sandstone beds

Permian

Permian rocks, undifferentiated
Shale, limestone, and sandstone; color ranges from gray to purple with some shades of green and orange. Would yield very small quantities of water to wells

Pennsylvanian

Pt — Tensleep sandstone
Sandstone, medium- to fine-grained with some beds of limestone. Sandstone is slightly calcareous. Yields moderate quantities of water to wells

Pa — Amsden formation
Shale, sandy, reddish; limestone and sandy shale interbedded; and sandstone, hard, fine-grained. Would yield very small quantities of water to wells

Mississippian

Madison limestone
Limestone, gray; contains chert and lenses of brownish dolomite. Yields moderate quantities of water to wells

Cambrian

Cambrian rocks, undifferentiated
Sandstone, medium-grained, varicolored, with lenses of quartzite, and shale with lenses of siltstone and sandstone. Yields moderate quantities of water to wells and springs

Precambrian

pC — Quartz-diorite, gneiss, and schist
Weathered material could yield small quantities of water to wells

Contact
Dashed where approximately located

Fault
U, *upthrown side*; D, *downthrown side*

Inferred or covered fault

Strike and dip of beds

Anticline

Domestic or stock well
Upper number indicates last number of well as described in the section on well-numbering system. Lower number indicates depth to water below land surface. Brackets indicate chemical analysis of water given

Flowing well

Test well

Spring

Oil-well test

TRUE NORTH — MAGNETIC NORTH — 15½°
APPROXIMATE MEAN DECLINATION 1958

Index map of Rawlins area showing geologic maps used in compiling this map
1. J. A. Barlow, 1952
2. J. H. Buehner, 1936
3. G. L. Del Mauro, 1953

GEOLOGIC MAP SHOWING LOCATION OF WELLS, SPRINGS, AND TEST WELLS IN THE RAWLINS AREA, CARBON COUNTY, WYOMING

Scale 1:63 360
1 0 1 2 3 4 5 Miles

INTERIOR GEOLOGICAL SURVEY, WASHINGTON, D C
MR 6881

Map compiled by D. W. Berry